

WHAT IS CLAIMED IS:

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1. A game and home entertainment device remote control system comprising:

2 a remote control having a touch pad, the touch pad generating a touch pad signal in response to a gesture on the touch pad;

3 a display screen having a display area; and

4 a controller in communication with the touch pad and the display screen, the controller operative to:

5 receive the touch pad signal,

6 determine whether the touch pad signal is for controlling a game or for controlling a home entertainment device,

7 if the touch pad signal is for controlling a game, perform a game activity in response to the touch pad signal and cause a result of the game activity to be displayed on the display screen, and

8 if the touch pad signal is for controlling a home entertainment device, enable a home entertainment device control function.

9 2. A game and home entertainment device remote control system as in claim 1 wherein the display screen is mapped to the touch pad so that the gesture on the touch pad is scaled correspondingly to an appropriate region of the display screen.

10 3. A game and home entertainment device remote control system as in claim 1 wherein the display screen displays a moveable object, the controller further operative to proportionately position the moveable object on the display screen corresponding to a location touched on the touch pad.

11 4. A game and home entertainment device remote control system as in claim 1 wherein the touch pad is logically divided into a plurality of regions, each region corresponding to one of a plurality of selectable items displayed on the display screen.

1 5. A game and home entertainment device remote control system
2 as in claim 1 wherein the touch pad is divided into a plurality of regions, the
3 controller further operative to interpret at least one gesture in one of the plurality
4 of regions differently than the at least one gesture is interpreted in another of the
5 plurality of regions.

1 6. A game and home entertainment device remote control system
2 as in claim 1 wherein the controller is operative to interpret at least one gesture on
3 the touch pad based on at least one parameter programmed by a user of the system.

1 7. A game and home entertainment device remote control system
2 as in claim 1 wherein the controller is further operative to adapt the operation of the
3 touch pad to at least one operator idiosyncrasy.

1 8. A game and home entertainment device remote control system
2 as in claim 1 wherein the system offers a plurality of games, the controller further
3 operative to vary the functioning of the touch pad to fit each of the plurality of
4 games.

1 9. A game and home entertainment device remote control system
2 as in claim 1 wherein the controller is further operative to vary the functioning of
3 the touch pad to fit each of a plurality of scenarios in at least one game.

1 10. A game and home entertainment device remote control system
2 as in claim 1 wherein at least one gesture associated with at least one game may be
3 taught to the controller by a user of the system.

1 11. A game and home entertainment device remote control system
2 as in claim 1 wherein the controller is further operative to associate a sequence of
3 game control options in at least one game with a gesture on the touch pad.

1 12. A game and home entertainment device remote control system
2 as in claim 1 wherein the controller is further operative to associate at least one
3 gesture with a particular user of the system.

1 13. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one simple linear movement.

1 14. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one free floating input.

1 15. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one gesture that is pad-to-screen mapped.

1 16. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one pressure sensitive gesture.

1 17. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one rotational control gesture.

1 18. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one velocity control gesture.

1 19. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one acceleration control gesture.

1 20. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one alphanumeric character entry gesture.

1 21. A game and home entertainment device remote control system
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least
3 one complex gesture, the complex gesture having at least two elements from a set
4 consisting of straight line movements, taps, holds and circular movements.

1 22. A game and home entertainment device remote control system
2 as in claim 1 wherein the touch pad is physically divided into a plurality of regions.

1 23. A game and home entertainment device remote control system
2 as in claim 1 wherein the controller determines whether the touch pad signal is for
3 controlling a game or for controlling a home entertainment device based on a signal
4 previously received from the remote control.

1 24. A game and home entertainment device remote control system
2 as in claim 1 wherein at least a portion of the display area is mapped to the touch
3 pad.

1 25. A game and home entertainment device remote control system
2 as in claim 1 wherein the remote control comprises a trigger switch.

1 26. A remote control for controlling a home entertainment device
2 and for playing on-screen games in conjunction with a display screen, the remote
3 control comprising:

4 a touch pad generating touch pad signals in response to user contact
5 with the touch pad; and

6 a controller in communication with the touch pad, the home
7 entertainment device and the display screen, the controller mapping at least a portion
8 of the display screen to a surface area of the touch pad, the controller moving an
9 object on the display screen to a location on the display screen corresponding to a

10 touched location on the touch pad surface area for playing at least one on-screen
11 game, the controller further recognizing gestures for controlling the home
12 entertainment device.

1 27. A remote control for a home entertainment device comprising:
2 a touch pad generating touch pad signals in response to user contact
3 with the touch pad; and

4 a controller in communication with the touch pad, the home
5 entertainment device and the display screen, the controller mapping at least a portion
6 of the display screen to a surface area of the touch pad, the controller moving an
7 object on the display screen to a location on the display screen corresponding to a
8 touched location on the touch pad surface area for playing at least one on-screen
9 game.

1 28. A remote control for controlling a home entertainment device
2 and for playing on-screen games in conjunction with a display screen, the remote
3 control comprising:

4 a touch pad generating touch pad signals in response to user contact
5 with the touch pad; and

6 a controller in communication with the touch pad, the home
7 entertainment device and the display screen, the controller recognizing gestures
8 made on the touch pad for playing at least one game and displaying results of
9 recognizing each gesture on the display screen, the controller further recognizing
10 gestures made on the touch pad for controlling the home entertainment device.

3 receiving at least one gesture on a touch pad, the touch pad remote
4 from the home entertainment device;

5 determining whether the at least one received gesture was made for
6 controlling the home entertainment device or for playing a game;

7 if the at least one gesture was made for controlling the home
8 entertainment device, generating at least one control signal for the home
9 entertainment device based on the at least one received gesture; and

10 if the at least one gesture was made for playing a game, performing
11 a game activity based on the at least one received gesture and displaying the results
12 of the performed game activity on a display screen.

1 30. A method of remotely controlling a home entertainment device
2 as in claim 29 wherein the touch pad is part of a remote control device.

1 31. A method of remotely controlling a home entertainment device
2 as in claim 30 wherein the determination of whether the at least one received gesture
3 was made for controlling the home entertainment device or for playing the game is
4 based on at least one input previously received from the remote control.

1 33. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising logically dividing the touch pad into a plurality of
3 regions, each region corresponding to one of a plurality of selectable items displayed
4 on the display screen.

1 36. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising adapting the operation of the touch pad to at least
3 one operator idiosyncrasy.

1 37. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising varying the functioning of the touch pad to fit each
3 of a plurality of games.

1 38. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising learning at least one gesture associated with the
3 game taught by a user of the touch pad.

1 39. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising associating at least one gesture with a particular
3 user of the system.

1 40. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing simple linear movement.

1 41. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing free floating input.

1 42. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing pad-to-screen mapping.

1 43. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing a pressure sensitive gesture.

1 44. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing a rotational control gesture.

1 45. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing a velocity control gesture.

1 46. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing an acceleration control gesture.

1 47. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing an alphanumeric character entry gesture..

1 48. A method of remotely controlling a home entertainment device
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures
3 on the touch pad as representing a complex gesture, the complex gesture having at
4 least two elements from a set consisting of straight line movements, taps, holds and
5 circular movements.